



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,730	02/13/2004	Doheon Kim	Q76055	5606
23373 7590 09/05/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER KEEFER, MICHAEL E	
			ART UNIT 2154	PAPER NUMBER
			MAIL DATE 09/05/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/777,730

Applicant(s)

KIM, DOHEON

Examiner

Michael E. Keefer

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date See Continuation Sheet.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :3/23/2007, 4/27/2006, 9/16/2005.

### **DETAILED ACTION**

1. This Office Action is responsive to the Application filed 2/13/2004.

#### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

3. Figures 4a-4c should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Isomura et al. (US 2002/0052966), hereafter Isomura.

Regarding **claim 1**, Isomura discloses:

A control point server comprising one or more modules, wherein the control point server is connected to a home network, and wherein said one or more modules perform a discovery process and a description process for one or more devices connected to the home network to organize service components of the respective devices. ([0004]-[0005] disclose discovering devices and retrieving the service information of those devices)

Regarding **claim 2 as applied to claim 1**, Isomura discloses:

a CP stack module for sending a search message to the devices connected to the home network and parsing a response message received from a home network device; ([0005] discloses multicasting an inquiry message to the devices on the network which then respond back)

a description module for requesting a description of the home network device, based on the parsed information received from the CP stack module; ([0005] discloses that the service information can be retrieved using the parsed information using the methods in [0004])

and a component generation module for organizing a service component that describes the services provided by the home network device based on the description requested by the description module. (Fig. 3 shows that the information about services provided by the devices are inserted into a common database which generically describes the services offered by the devices.)

Regarding **claim 3 as applied to claims 1-2**, Isomura discloses:

wherein the modules further include a component lookup table module for storing information on the service component generated by the component generation module in a predetermined lookup table and searching for and transmitting information on a component of a specific device according to a user's control request for the specific device. ([0030] discloses that when a device inquires the server about a certain type of service or device, it looks it up in the database/table (Fig. 3) and sends the information back to the inquiring device.)

Regarding **claim 5 as applied to claims 1-2**, Isomura discloses:

wherein the component generation module transmits a component of a specific device according to a user's control request for the specific device. ([0030] discloses that when a device inquires the server about a certain type of service or device, it looks it up in the database/table (Fig. 3) and sends the service component back to the inquiring device.)

6. Claims 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Isomura. Regarding **claim 6**, Isomura discloses:

A control point comprising a control unit, wherein the control unit multicasts a search message for searching for a device connected to a home network and receives a service component of the device from a control point server that organizes the service component of the device on the home network. ([0003] lists possible SDPs for use with his invention, one of which is uPnP, which uses SSDP for its discovery protocol. (See the article "UPNP - Multiple Windows XP/ME/98 Vulnerabilities, Page 2, the first paragraph under the

heading "2. The DoS and DDoS" which states that uPnP consists of multiple protocols, one of which is SSDP.) In addition, in the definition of the SSDP protocol (Simple Service Discovery Protocol/1.0 Operating without an Arbiter), section 4 outlines the discovery request, which states that when a control point seeks to find a certain device it can multicast this message to find the appropriate devices. Given that uPnP is the SDP, [0030] discloses an appliance sending an inquiry message (using SSDP, this would be a multicast discovery message) to which the server will return any matching entries from its common database.)

Regarding **claim 7 as applied to claim 6**, Isomura discloses:

wherein the control unit multicasts the search message for searching for the device on the home network and controls the device by receiving information on the device from a controlled device for controlling respective devices connected to the home network. (When using a multicast SSDP discovery message, all SSDP compliant devices matching the search criteria reply, therefore in addition to a reply received from the SDP server, it would receive replies from all applicable devices within its network (i.e. SDP A Fig. 1))

7. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Isomura.

**Claim 9** recites the combination of claims 3 and 6. Isomura discloses claim 9 for the reasons cited above in claims 3 and 6.

8. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Isomura.

**Claim 10** recites essentially the same subject matter as claim 3 above and is rejected for the same reasons as cited above.

9. Claims 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Isomura.

Regarding **claim 12**, Isomura discloses:

(b1) requesting a search for a particular device to be controlled by a control point; ([0030] discloses an appliance (i.e. control point searching for a device)

(b2) searching for information on a component of the particular device in a lookup table, according to the request by the control point; and ([0030] discloses the SDP server searching the common database for devices that match the search criteria)

(b3) transmitting the component of the particular device to the control point. ([0030] discloses sending the information about the device to the requesting appliance)

Regarding **claim 13 as applied to claim 12**, Isomura discloses:

(b2a) the step of directly requesting a component generation module to transmit the component of the particular device by the control point. ([0030], if the data found in the database match the same SDP protocol as the control point, it will directly send this information without needing to send it through a conversion.)

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura as applied to claims 1-2 and 10 above, and further in view of Choi (US 2002/0040397).

Isomura discloses all the limitations of claims 4 and 11 except for the service server checking the status of the devices.

The general concept of checking the status of devices in a look-up table is well known in the art as taught by Choi. ([0051] teaches the polling of service servers to make sure that they are still available on the network)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Isomura with the general concept of checking the status of devices in a look-up table as taught by Choi in order to use the database space efficiently by removing database entries that are no longer valid.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isomura as applied to claim 6 above, and further in view of Thompson (US 7143143).

Isomura discloses all the limitations of claim 8 except for the control point only using the first received response to its multicast search.

The general concept of only using the first returned response from a multicast request is well known in the art as taught by Thompson. (Fig. 11, and its description in paragraph 61 of the detailed description "At decision block 1104, a test is done to determine whether a response is received from the multi-cast request. If a response is

received, at block 1106, the cache server accepts the first response and stores the data. *Once a first response is received, any subsequent responses are rejected.*"

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Isomura with the general concept of only using the first returned response from a multicast request as taught by Thompson in order to allow for faster processing so that the device does not have to wait for all responses to return before continuing processing.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

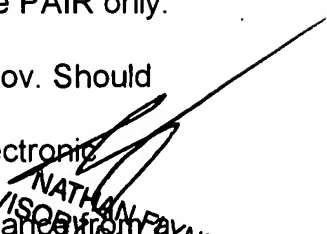
EP 1058422 discloses a system for bridging a HAVi and uPnP network. Note Fig. 3, where bridge C acts as a control point server, aggregating service data of the devices on each network so that they can be accessed from any control point.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Keefer whose telephone number is (571) 270-1591. The examiner can normally be reached on Monday through Friday 5:30am-2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
NATHAN FYNN  
SUPERVISOR  
PATENT EXAMINER

MEK 8/27/2007